

### **REMARKS/ARGUMENTS**

These remarks are submitted in response to the Office Action of April 26, 2007 (hereinafter Office Action). As this response is timely filed within the 3-month shortened statutory period, no fee is believed due. Nonetheless, the Examiner is expressly authorized to charge any deficiencies or credit any overpayment to Deposit Account No. 50-0951.

In the Office Action, Claims 1, 5, 6, 7, 11, 12, 13, 17, and 18 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Published Patent Application 2003/0212561 to Williams, *et al.* (hereinafter Williams). Claims 2, 8, and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Williams, in view of U.S. Published Patent Application 2002/0076008 to Neary (hereinafter Neary). Claims 3, 9, and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Williams, in view of Neary, and further in view of U.S. Published Patent Application 2006/697964 to Dodrill, *et al.* (hereinafter Dodrill).

Applicants have amended independent Claims 1, 7, and 13 to further emphasize certain aspects of the invention. Applicants also have amended dependent Claims 3, 9, and 15 to emphasize certain additional aspects of the invention and to maintain consistency among the claims. With this amendment, Applicants have cancelled dependent Claims 2, 8, and 14.

As described in the following section, the claim amendments are fully supported throughout the Specification. No new matter has been introduced by the claim amendments.

### *Aspects Of The Invention*

It may be useful prior to addressing the cited references to reiterate certain aspects of Applicants' invention. One embodiment of the invention, typified by amended Claim 1, is a method of verifying software program operations during execution of a voice response system.

The method can include establishing a voice link between a test system and the voice response system, executing one or more operational software programs in the voice response system to determine a voice prompt to play over the established voice link, and performing speech recognition at the test system to speech recognize the voice prompt played over the established link and to convert the voice prompt to text.

Additionally, the method can include gathering at the voice response system execution information associated with the one or more executing operational software programs. The execution information can identify computer programs and modules used by the voice response system during the step of executing one or more operational software programs.

More particularly, the execution information can include one or more execution conditions specifying data retrieved in executing one or more operation software programs. (See, e.g., Specification, paragraph [0021].) The execution information can further include one or more execution conditions specifying a method call performed in executing one or more operation software programs. (See, e.g., Specification, paragraph [0021].) The method further can include representing the execution information using one or more dual tone multi-frequency signals, and sending the one or more one or more dual tone multi-frequency signals representing the execution information to the test system over the voice link. (See, e.g., Specification, paragraph [0022].)

**The Claims Define Over The Cited References**

As already noted, independent Claims 1, 7, and 13 were rejected as being anticipated by Williams. Williams is directed to a "virtual telephone caller system" and related methods for generating "test scripts for testing an [interactive voice response system]." (Williams, paragraph [0020], lines 1-6, and lines 10-18; see also Williams, Abstract, lines 1-9.)

Applicants respectfully submit that Williams fails to teach, expressly or inherently, every feature recited in Claims 1, 7, and 13, as amended. For example, as acknowledged at pages 4-5 of the Office Action, Williams does not explicitly teach specifying execution information pertaining to an interactive voice response (IVR) system using dual tone multi-frequency signals.

It is stated at page 5 of the Office Action, however, that Neary teaches this feature. Neary is directed to a an "interactive audio system" that can be operated in a "call-flow verification mode (termed a CFR mode)." (Neary, paragraph [0005], lines 1-6.)

Nonetheless, Applicants respectfully submit that, regardless of Neary's reference to dual tone multi-frequency (DTMF) signals, Neary, even when combined with Williams, fails teach or suggest each of the features recited in amended Claims 1, 7, and 13. For example, Neary's utilization of DTMF signals is limited to encoding simulated utterances exchanged between a CFV module and an IVR system. (See, e.g., Neary, paragraphs [0019], [0022]-[0024], [0030]-[0032].) Such simulated utterances, however, are not comparable to execution information associated with one or more operational software programs executing in an IVR system, as recited in Claims 1, 7, and 13. Specifically, the simulated voice utterances in Neary do not, for example, identify either computer programs or modules used by an IVR system. The distinction is underscored in

portions of the reference cited in the Office Action in which Neary explicitly describes the use of DMTF signals to represent word utterances such as ONE, PRESS, and DATE:

"[0030] FIG. 4 illustrates prompt signals including coded signals (DTMF signals) for the one-word utterance "one". In this example, the second parameter, or the "framing" parameter, is set for inclusion of the actual utterance. The third parameter, or the "extent" parameter, is set for five characters. In this example, as illustrated in FIG. 4, for call-flow verification the prompt signals transmitted by IVR system 10 consist of the actual utterance "one" preceded by DTMF signals representing the letters "o", "n", "e" in ASCII format (i.e., representing the decimal equivalents thereof) and followed by the same DTMF signal content again representing each letter of the utterance label "one". In the present coding protocol, setting the extent parameter to "5" provides for encoding of the first five characters of an utterance label in a leading series of DTMF signals and the last five characters in a trailing series of DTMF signals. Here, since the utterance label includes only three characters, all three characters are represented in both the leading and trailing coding.

"[0031] FIG. 5 illustrates prompt signals provided for call-flow verification regarding the utterance "Press one for date". Again, the framing parameter is set for inclusion of the actual utterance and the extent parameter is set for five characters. As shown, the leading series of DTMF signals represents the five letters of "press" and the trailing DTMF signals represent the five characters "space", "d", "a", "t", "e". For this purpose, the space between

words is treated as a character and represented by appropriate ASCII coding.

"[0032] FIG. 6 also addresses the utterance "Press one for date". However, in this example the second or framing parameter is set for exclusion of the actual utterance and the third or extent parameter is set for "all" characters. Thus, the actual utterance is not included in the prompt signals, but the eighteen characters (including spaces) of the utterance label are represented by a series of DTMF signals representing the characters in ASCII format." (Neary, paragraphs [0030]-[0032]; see also FIGS. 4-6.)

Applicants respectfully submit that the conveying of "utterances," regardless of whether represented by DTMF signals or in some other form, is not comparable to providing execution information that is represented by DTMF signals and that is associated with executing operational software programs of an IVR system. Accordingly, Neary fails to teach or suggest transmitting DTMF signals representing execution information that identifies computer programs and modules used by the voice response system during the step of executing one or more operational software programs, as recited in Claims 1, 7, and 13.

Williams similarly fails to teach utilization of the type of execution information provided with Applicants' invention. In the portion describing the figure (FIG. 7) cited in the Office Action, Williams merely discloses displaying different "icons connected together to form a test script:"

"[0078] Referring now to FIG. 7, a sample call flow diagram for an IVR application is shown. Each icon represents a piece of test code for testing the function represented by the icon. The icons are connected together to form a test script which tests the application." (Williams, paragraph [0078]; see also FIG. 7.)

Applicants respectfully submit, however, that merely displaying selectable icons for initiating a test routine by selecting an icon neither teaches nor suggests any aspects of Applicants' invention. In particular, the display of selectable icons does not teach or suggest transmitting DTMF signals that represent execution information, wherein that execution information identifies computer programs and modules used by the voice response system during the step of executing one or more operational software programs, as recited in Claims 1, 7, and 13. Displaying selectable icons as in Williams provides none of the information contained in Applicants' execution information.

Moreover, neither Williams nor Neary teaches or suggests providing execution information that includes one or more execution conditions specifying data retrieved in executing one or more operation software programs, as expressly recited in amended Claims 1, 7, and 13. Nor does either reference teach or suggest providing execution information that includes one or more execution conditions specifying a method call performed in executing one or more operation software programs, as also expressly recited in amended Claims 1, 7, and 13.

Accordingly, neither Williams nor Neary teaches or suggests every feature recited in independent Claims 1, 7, and 13, as amended. Applicants respectfully submit, therefore, that amended Claims 1, 7, and 13 define over the prior art. Applicants further respectfully submit that, whereas each of the remaining claims depends from Claim 1, 7,

or 13 while reciting additional features, the dependent claims likewise define over the prior art.

### **CONCLUSION**

Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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